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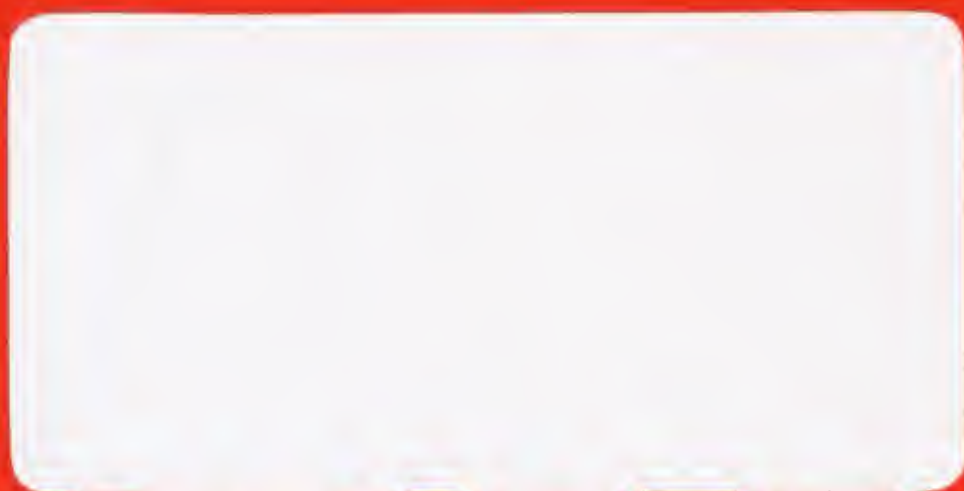
Faculty Working Papers

DEVELOPING PRODUCT-SPECIFIC TAXONOMIES OF
CONSUMPTION SITUATIONS

Russell W. Belk, Associate Professor of
Business Administration

#509

College of Commerce and Business Administration
University of Illinois at Urbana-Champaign



FACULTY WORKING PAPERS

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Summary:

This paper demonstrates a two-step procedure for developing taxonomies of consumption situations affecting choices within a product class. The first stage utilized diary data to identify sets of consumption situations and product choices in a prescribed area of consumption. The second stage pairs all identified situations and choice alternatives and acquires appropriateness ratings from the same subjects who generated each set. Within-subject cluster analyses of the resulting matrices provides useful situation taxonomies which are then compared for generalizability across subjects for the total sample or more homogeneous subsegments.

DEVELOPING PRODUCT-SPECIFIC
TAXONOMIES OF CONSUMPTION SITUATIONS¹

Russell W. Belk²

THE NEED TO CONSIDER CONSUMPTION SITUATIONS AFFECTING CONSUMER CHOICE

There is a growing body of evidence which demonstrates that most often a knowledge of a consumer's general traits, desires, and attitudes is not enough to be able to predict that consumer's choices of products and services. It is becoming increasingly evident that in many product categories the specific consumption situation anticipated for the product is an important factor affecting the consumer choice process. Sandell (1968) demonstrated that beverage preferences may differ markedly depending upon the situation in which the beverage is consumed. Evidence of consumption situation effects has also been found in studies of consumer preferences and choices of leisure activities (Bishop and Witt, 1970), fast foods (Miller, 1974; Belk, 1975b), soft drinks (Bearden and Woodside, 1976; Sharpe and Granzin, 1974), snack products (Lutz and Kakkar, 1974; Belk, 1974b), D-cell batteries (Ptacek and Shanteau, 1978), beer (Beardon and Woodside, 1977), meat products (Belk, 1974a), food products (Kamen and Eindhoven, 1963), mouthwash (Srivastava and Shocker, 1977), and motion pictures (Belk, 1974b).

It may be noted that the products and services above are all non-durables for which the item selected may readily be altered from one

¹An earlier version of this paper based on different analyses and data, was presented at the University of Pittsburg Product Planning Workshop, November 19, 1977.

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consumption situation to another. While there is some evidence that extreme differences in single consumption situations such as choosing a product for either personal use or as a gift, may affect choices of some durable goods such as small appliances (Vincent and Zikmund, 1976; Hansen, 1972; Ryans, 1977) and tableware (Grønhaug, 1972), such items are less susceptible to influence from a single consumption situation than are consumer non-durable goods. However it is possible that consumption situations may still exert an influence on consumer purchase decisions when it is not feasible to change products to suit the situation. As Berkowitz, Ginter, and Talarzyk (1977) have illustrated with regard to automobile choice behavior, depending upon the anticipated frequency of various usage situations anticipated for a product, the evaluation of various product attributes desirable in these situations may receive heavier or lighter weights in brand attitudes. That is, consumers may somehow weigh their decision criteria for a product which is to serve in multiple consumption situations according to the anticipated frequency or, perhaps, the importance of each situation. If this sort of weighting does take place, even choices of such major durable products as a home may be affected by characteristics of the consumption situations planned for the product. And in instances in which the house is later found to be inadequate for emerging consumption situations such as entertaining guests or growing vegetables, the purchaser may be prone to remodel or move.

In addition to influences from consumption situations in the purchase of major durable and nondurable products and services, there are

certain minor durable and nondurable products for which the influence of consumption situations may be recognized in another way. Consider products such as food seasonings, record albums, clothing, and carpentry tools. In these product categories an array of choices may be accumulated in order to provide a stockpile of readily available choices to draw from when an appropriate consumption situation occurs. The initial purchase of such products may either be in response to an impending single consumption situation (e.g., a dress for an upcoming party) or in response to potential future consumption situations which are felt to be likely to occur and/or to be highly important to be prepared for if they do occur (e.g., guest bed linen). In either case, the good is usually retained in the consumer's inventory for use in appropriate future consumption situations. Ptacek and Shanteau (1978) found some evidence that paper towels are one product often purchased with such potential usage situations in mind.

The three ways just outlined in which consumption situations may affect consumer purchases may be summarized as:

1. Single use consumption situational effects on nondurables: in which a good is purchased for use in a single rapidly anticipated consumption situation;
2. Multiple use consumption situational effects on major durables: in which a good is purchased which "best" satisfies the various demands of several anticipated consumption situations; and
3. Intermittent use consumption situational effects on minor durables and nondurables: in which goods are purchased which will be kept in inventory, possibly as part of an array of such goods, for use in those anticipated consumption situations for which they may be appropriate.

Considering all three types of consumption situation influence, there are few, if any product and service purchases which are devoid of potential influence from the consumption situation. Because consumer purchases may frequently be guided by the match between the consumption situation or situations envisioned for the item being chosen and the consumption situations considered to be appropriate for a given item, it may be erroneous and misleading to assume that a consumer maintains a single evoked set of product alternatives in a fixed product category. Instead it seems likely that when consumers have clear expectations of the consumption situations in which a product can and will be used, the consumer's evoked set of alternatives is also tied to the set of intended consumption situations envisioned. In these instances an accurate understanding of such notions as "competing products", "salient attributes", and "product position", requires specification of the types of consumption situations which the consumer may have in mind.

WAYS TO CONCEPTUALIZE CONSUMPTION SITUATIONS

The Need for a Taxonomy

Anyone who has attempted to conceptually or operationally deal with situations at a general level has experienced the frustration of trying to specify a construct of enormous breadth and minimal clarity. Although we may readily define a situation as the conditions present at a fixed time and place, this does nothing to delineate the specific conditions which comprise a situation. Since the construct of situation must be able to be operationally specified and measured to be of any practical

use, some sort of a classification of situations which describes the domain of situations or situational variables seems essential.

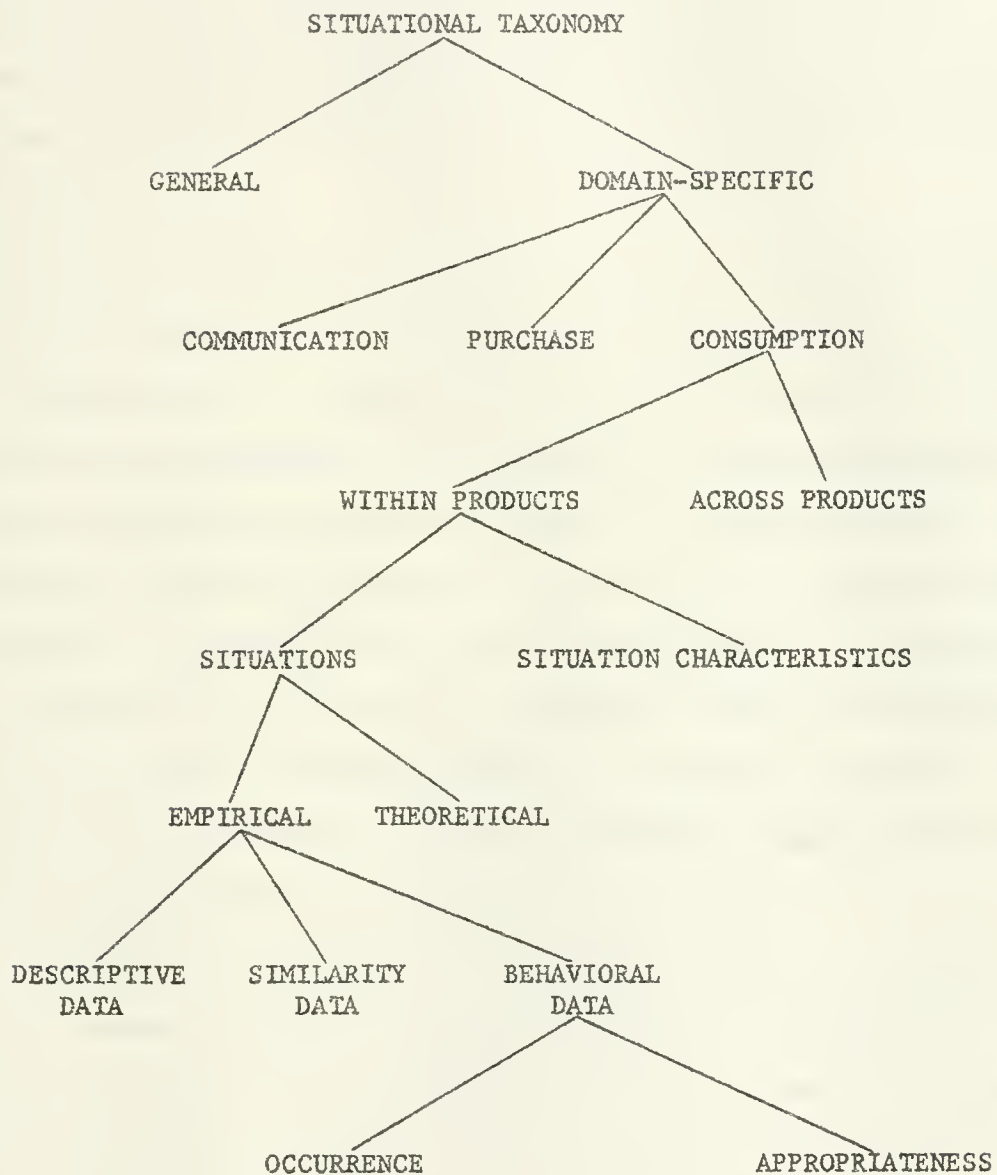
Types of Potential Taxonomies

While the need for taxonomy of situations may be evident, the best means for developing such a taxonomy are not entirely clear. An array of options exists for pursuing a situational taxonomy, as illustrated in Figure 1. The elaborated pathway in this diagram also serves to illustrate the options employed in the present study.

The first pair of options involves selecting between two broad approaches to developing any situational taxonomy: A) attempting to classify all possible situations or situational variables, and B) attempting to classify all relevant situations or situational variables affecting a given domain of behavior. Two examples of approach A) are the work of Sells (1963) who developed a list of over 200 situational variables including role expectations, risk, and level of skills required, and, at the other end of a continuum of detail, the work of Mehrabian and Russell (1974) who developed a classification of three situational properties: pleasure (pleasingness), arousal (excitingness), and dominance (amount of behavioral constraint). Although such efforts to classify all possible situations or situational variables are very useful in developing an understanding of the major situational dimensions which may affect behavior, they suffer two drawbacks. One problem is that to date no single comprehensive and generally accepted taxonomy has been developed. And as Kakkar and Lutz (1975) point out, those general taxonomies which have been developed are not highly appropriate for investigating consumer

FIGURE 1

Options for Situational Taxonomy



behavior. The other problem with the general taxonomies is that the situations and situational variables which affect some consumer behaviors (such as choosing a type of liquor to purchase) may be wholly different from those which affect other consumer behaviors (such as choosing a type of laxative to purchase). Because of these difficulties, approach B) of trying to classify all relevant situations or situational variables is appealing.

Relevant situations or situational variables are those which can and do affect a given set of behaviors. If these situations and variables are selected because they affect the behaviors of interest, the potential for developing conceptually rich but pragmatically meaningless situation concepts is reduced or eliminated. And since the question of what types of situations or situational variables exist can then more readily be framed as an empirical question, there is also greater potential for agreement about a taxonomy once it has been constructed. Therefore specifying a domain of behaviors of interest rather than attempting to construct a grand taxonomy of all situations or situational variables which may affect consumer decisions, is both more feasible and more useful.

In seeking a domain-specific situational taxonomy in a consumer behavior context we might next specify whether we are interested in situational factors affecting purchase situations, communication situations, or consumption situations. This distinction was suggested by Hansen (1972) and is a useful but potentially misleading one. It is potentially misleading because for all three types of situations we will normally be interested in consumer purchase behaviors. In the case of

communication situations we are most often interested in the effect of advertising or other communications (and attendant situational conditions) on future product choice behavior; and in the case of consumption situations we are most often interested in the affect of consumption situational conditions on prior product choice behavior. Obviously the only way in which consumption situations can influence prior behavior is through the consumer's anticipation of these consumption situational conditions while buying. That is, we are interested in those aspects of the consumption situation which enter into the purchase situation because the consumer is envisioning these future conditions while buying. In contrast, the other relevant situational conditions in the purchase situation are likely to be unanticipated by the consumer. Such conditions as the weather, time pressure, point of purchase specials, and consumer moods are purchase situation conditions which are most likely to alter prior purchase intentions when they differ from the purchase situation anticipated when the intentions were formed.³ Because the effects of anticipated consumption situations such as an upcoming dinner party are, by the definition of "anticipated", more stable and recognizable than the effects of unanticipated purchase situations such as a crowded store, by focusing on the purchase effects of anticipated consumption situations we are dealing with situational influences which the consumer can and does give as reasons for a purchase selection.

³Sheth (1971) has made the distinction between anticipated and un-anticipated situational conditions somewhat differently.

Within the still large domain of consumer purchase behaviors affected by anticipated consumption situations, "relevant situations" are likely to differ further by product. Even though the desirability of product-specific consumption situation taxonomies is evident, it is not always clear what the boundaries should be in defining a product or product class. This is because we do not always have a clear understanding of what product items are seen as alternatives for each other in at least some consumption situations. For instance a given consumer may consider Coca Cola and Seven-Up to be alternative beverages when planning for week-end lunches, but this consumer may see one or neither as alternatives when planning for mixes to drink with liquor at a social gathering (Robertson, 1970). For this reason it is important to err on the side of too broad a product set rather than on the side of too narrow a product set when pursuing a product-specific consumption situation taxonomy. Srivastava and Shocker (1977) have recently demonstrated an application of procedures developed by Stefflre (1971) for generating a set of potentially substitutable products. They also found that group interviews were very useful in generating a set of products which met or exceeded each subject's set of potentially substitutable alternatives. Unless a product class suffers little or no perceptual ambiguity, methods such as these should be a prerequisite in seeking broad products groupings for which to pursue consumption situation taxonomies.

The preceding discussion has referred to the possibility that we might wish to develop taxonomies of either complete consumption situations or else characteristics of situations. As Fredericksen (1972) points out,

this distinction parallels the divergence of approaches to studying individual differences in attempting to develop either taxonomies to classify individuals or taxonomies to classify attributes of individuals. For instance we might classify consumers in toto by using a scheme such as Stone's (1954) categorization of shoppers as apathetic, economic, personalizing, or ethical. Alternatively we might regard any or all of a number of personality trait inventories as comprehensive descriptors of the attributes of individual consumers which cause them to behave differently. Although both taxonomies of situations and taxonomies of situational attributes would potentially be useful, there is one advantage which presently favors the development of taxonomies of situations rather than situational attributes. The advantage is that, especially within a prescribed product class, the domain to be classified is easier to specify when it consists of whole consumption situations rather than characteristics of these situations. Kakkar and Lutz (1975) have developed an interesting set of three situational attribute dimensions (social interaction, personal involvement, and temporal commitment) from factor analysis of responses to 11 original dimensions describing snack product consumption situations, but they recognize that there is little assurance that the original set of dimensions captured all relevant differences between the situations. Although consumption situations for a group of products such as snacks may be diverse, they are certainly easier to recognize and are probably fewer in number than the potential attributes which such situations may possess.

In pursuing a taxonomy of situations, as well as in pursuing a taxonomy of situational attributes, another decision which must be made concerns the method of classification. Two very broad approaches would be theoretical and empirical classifications. A theoretical derivation would be appealing, but unfortunately the diversity of situational influences argues against a single comprehensive theory of these effects. It is, for instance, difficult to imagine a single theory which could capture the purchase influences of consumer mood, shelving arrangements, salesperson's eye contact, and time pressure. As a result, the few theory-derived situational constructs which do exist are limited, intuitive, and relevant primarily to a limited set of consumer responses.⁴ This leaves empirical classification as the most feasible approach and raises the further question of the type of data to be used in generating a taxonomy.

One data approach to an empirical classification of situations would be to gather a variety of descriptive rating statements about situations of concern and then classify situations according to similarities in patterns of a sample group's or subgroup's responses to these statements. The difficulty with this approach is the same as that with developing taxonomies of situational attributes: the relevant domain is difficult or impossible to identify. A second approach avoids the problems of selecting an attribute set by using multidimensional scaling of similarities data gathered on a set of situations. While this approach avoids the problems of selecting an attribute set, it can become unwieldy with a large number

⁴Examples are Lavidge's (1966) "circus atmosphere", and Engel, Kollat, and Blackwell's (1968) "precipitating circumstances".

of situations identified in reasonable detail. Perhaps more importantly there is also no assurance that the perceptual dimensions generated in multidimensional scaling will be related to the behaviors of interest.⁵ Another approach which has been suggested by various authors (e.g., Fredericksen, 1972; Belk, 1975a; Price, 1974), is to collect data on the within-situation occurrence or appropriateness of various behaviors relevant in a set of situations.

Measuring the occurrence of different behaviors within different situations would probably provide the best data for a taxonomy of consumption situations, but this approach suffers one obvious limitation. The primary problem, especially if naturalistic data is sought, is the difficulty of collecting such data. In order to obtain sufficient data to estimate the probabilities of occurrence of all relevant behaviors within each situation in some evoked set of consumption situations, a large number of observations is required even on very infrequent, but plausible, situations. Because of this problem, the present study uses a compromise two-step approach in which observations are used to establish evoked sets of situations and choices, and then appropriateness measures are obtained from pairings of all possible situation and choice combinations.

Additional Criteria for Taxonomies

The prior discussion is summarized and extended by the following list of criteria for a consumption situation taxonomy:

⁵The problem of objective versus perceptual measurements of situations is debated by Belk (1975a) and Lutz and Kakkar (1975), and has recently been summarized by Pervin (1978).

1. Product Relevance
2. Consumer Relevance
3. Aggregation Potential
4. Decision-maker Relevance.

As already argued, a product-specific taxonomy of consumption situations is more feasible, more manageable, and more useful than a general approach to situation taxonomy. Since consumption situations are infinitely diverse across products, it is especially necessary and desirable that a taxonomy of consumption situations be approached at the product class level.

It is also imperative if a consumption situational taxonomy is to reflect situations or conditions which can and do affect product choice, that the taxonomy be relevant to consumers. For instance if a consumer's purchases of gifts are contrasted in instances in which the consumption situation is either a shared holiday (e.g., Valentine's Day, Christmas) or a person-specific gift-giving occasion (e.g., birthday, graduation), but the consumer's only relevant considerations are whether the recipient is young or old, and male or female, then the basis for the taxonomy is meaningless. The ultimate translation of this criterion is that the typology should be related to differences in the consumer's actual behavioral choices across situations. A translation of this criterion based on perceptual differences as a basis for situational taxonomy would be weaker since these perceptual differences may or may not be sufficient to cause differences in behavior. This would be true in the previous example if the gift-giver indeed distinguished between shared and person-specific gift-giving occasions, but the distinction did not affect gift choices.

The third criterion, that a consumption situation taxonomy has aggregation potential, assumes that individual differences will exist in the consumer behaviors which covary with various situational conditions in a consumption category. Given this assumption, the criterion calls for sufficient homogeneity of situational effects across consumers that most of the situation or situational condition types in the taxonomy affect most of the consumers in a similar manner. With data on consumer responses to a variety of situations, it is an empirical question whether there is sufficient homogeneity of effects for a common situational taxonomy or whether several segments of similar consumers need to be treated separately. It is conceivable, for example, that children and adults or different groups of adults may differentiate different situations or aspects of situations in selecting clothing to purchase and wear. While a child's clothing selections for play situations may be viewed as for either indoor or outdoor and for summer or winter situations, an adult may select a "play" wardrobe with different outfits for tennis, golfing, skiing, jogging, fishing, hunting, bowling, and other distinct activity types. The criterion of aggregation potential requires that a typology have some generality beyond applying to a single individual with ideosyncratic responses to situations. This means that both the situations and the effects of these situations on consumer choice behavior must be shared to a meaningful degree.

The fourth criterion requires that a situational taxonomy have relevance to a marketer or public policy decision-maker. Ideally an identified situational response pattern could be translated into a marketing strategy

by designing a product offering and marketing program directed at a particular type of use situation for which few other offerings are seen by consumers to be appropriate. From the point of view of public policy or business, a situational taxonomy could also be relevant because it allows a better understanding of which product offerings actually do compete in the sense of being seen by consumers as alternative solutions to particular types of consumption situation problems (see Day and Shocker, 1976). While it is difficult to envision totally inactionable consumption situational typologies when the other three criteria are met, there are likely to be some typologies which are more readily actionable than others. For instance, consumption situation conditions described in terms of emotional states are likely to be harder to identify and communicate than are consumption situational conditions described in terms of consumer activities. However taxonomies of consumption situations are generally more actionable than taxonomies of unanticipated aspects of the purchase situation.

As noted earlier, the present study restricts itself to a single product category and measures the situational occurrence and appropriateness of various behaviors. By proceeding in this manner the product specificity and decision-maker relevance criteria for a situational taxonomy are readily met, but the remaining criteria of consumer relevance and aggregation potential are less certain. The remainder of this paper is devoted to illustrating a behavior-appropriateness-based method of deriving product-specific consumption situation taxonomies which satisfy the consumer relevance criterion as well, and allow assessment of the

aggregation potential of the resulting taxonomy. In fact it is the potential opposition of these last two criteria which motivates this paper. The substantive question considered is whether a taxonomy which is relevant to a consumer can be generalized to other consumers and still have relevance. The methodology employed provides a means for answering this question in the context of any product category which the consumer can recognize and in which choices are frequently made.

AN ILLUSTRATIVE STUDY

Method

A study was undertaken in order to demonstrate an approach for developing product-specific consumption situation taxonomies for single individuals. The method employed was based on semi-structured diaries of consumption situation occurrences and corresponding product choices for an intermittent use minor durable. The product context chosen for this illustrative study was warm weather clothing exclusive of underwear and outerwear. Data were collected from a sample of 15 White middle class undergraduate students (7 males and 8 females) at the University of Illinois. All agreed to keep diaries of the clothing which they wore and the "primary" and "secondary" situations in which they wore these outfits during a 15 day period. Swimwear, uniforms, and similar highly use-specific outfits were excluded from analysis. Primary situations were operationally defined as "situations (a time and place in which you and possibly others engaged in some activity) in which you wear a particular outfit or item of clothes with primarily that situation in mind." Secondary situations were described as other situations preceding or

following this one in which the clothing chosen was also expected to be worn. Subjects were asked to draw on other recent (June to September) clothing consumption situations remembered, in order to supplement the diary data and bring the total number of situations recorded to between 25 and 33. These latter additions accounted for slightly less than one-third of the situations generated and predictably biased the situations sampled toward more prominent and memorable occasions. It will be noted that consumption situations were considered as they affected selection of an item from a wardrobe rather than selection of an item for a wardrobe. This was based on the assumption that actual consumption situations are an accurately measurable surrogate for anticipated consumption situations. The implications of this assumption are discussed after presenting results.

Subjects were encouraged to describe each situation in their own words and short phrases, but to include answers to the following questions:

A. Description

1. What was this situation like?
2. What did you do there?
3. Who were you with?
4. Who did you see there?
5. What happened?
6. What were your feelings while there?

B. Special Influences on Clothing

1. What, if any, circumstances influenced your specific choice of clothing?
2. What secondary situations...preceded or followed this one?

C. Characteristics

1. What are the major characteristics of this situation?
2. What single word or short phrase would you use to describe this type of situation?

In describing the clothing worn in each situation, the subject was asked to include:

A. Description

1. What color, style, pattern, cut, material, and brand characterize the distinctive features of each item?
2. Which if any of these items do you wear only as a set?

B. Characteristics

1. How did you feel when wearing this clothing in this situation?
2. What are the major characteristics of this group of clothing items?

After subjects had listed situations and corresponding clothing ensembles they were instructed to transfer these designations by number and brief description onto a master matrix in which situations formed the columns and clothing groups formed the rows. The subjects were then asked to fill-in the matrix by rating how appropriate each clothing outfit listed would be for each situation listed, using the following codes:

- 1 = Highly Inappropriate (all wrong)
- 2 = Somewhat Inappropriate (mostly unsatisfactory)
- 3 = Somewhat Appropriate (mostly satisfactory)
- 4 = Highly Appropriate (just right).

It was pointed out to subjects that the diagonal of actual situation and clothing matches need not necessarily be all filled with "4's".

This free-response method of data collection resembles the work of Rosenberg (1977) in studying person perception and the work of Pervin (1976) in studying general situational influences on behavior. The collection of appropriateness measures follows several researchers including Price (1974) and Srivastava and Shocker (1977). In beginning with unstructured subject listings of situations and clothing choices and moving to structured appropriateness ratings, the exploratory advantages of using unconstrained descriptions in the subject's own words are combined with the quantification of this data which is necessary to derive classifications of the consumption situations generated. The appropriateness matrices developed by this procedure were then ready for the within-subject classifications which were to form the basis for comparisons of the generality of the resulting taxonomies across subjects.

Results

Of the several methods of data reduction possible for each of the appropriateness matrices, Johnson's (1967) hierarchical clustering method was employed twice; once using clothing as observations in order to cluster situations, and once using situations as observations in order to cluster clothing.⁶ In each case a decision was made on the number of clusters to retain based on the ratio of average within-cluster distances to average overall distances. Then for each combination of a situation cluster and a clothing ensemble cluster, the mean appropriateness rating of the under-

⁶For a comparison analysis of situation types, using factor analysis, see Belk (forthcoming).

lying items in the underlying situations were calculated. Because of space limitations and for the sake of clarity, data will be presented only for four male subjects whose data resulted in retaining three or four situation clusters and three or four clothing clusters. Also for the sake of clarity, tests on mean differences are not presented here; however, on the average mean differences of .75 or greater were found to be significant. Tables 1 through 4 provide summaries of the clusters obtained for the data from "Pete", from "Bob", from "Ken", and from "Tom". The most basic comparison of interest across these four subjects is the nature of the situation clusters, but where a common situation cluster occurs it is also of concern whether the subjects who seemingly employ this type of situation as a determinant of clothing choice, each select the same types of clothing when situations of this type occur. Finally it may or may not be of importance that subjects who react to situations with behavioral similarity also characterize these situations and/or the corresponding clothing choices with perceptual similarity. (Data bearing on this last question may be found in Belk, forthcoming.)

While obviously a larger number of subjects are needed for a definitive conclusion about the homogeneity of situational effects within a group of people such as college students, certain common themes emerge from the tabled results. It may be seen that an outdoor situation cluster emerged for each of these subjects, a "formal" social cluster and a "fun" social cluster both emerged for three of the four subjects, and an everyday/public cluster emerged for two subjects, with the remaining two subjects having either an everyday or public cluster. Thus, it may be seen that

TABLE 1

Mean Appropriateness Scores* of
Clothing Clusters by Situation Clusters
For "pete"

SITUATION CLUSTER: EXAMPLES: CLOTHING CLUSTER AND EXAMPLES	1. Outdoor Situations Hiking Mowing the Lawn n=10	2. Fun/Social Situations At a Discotheque Dinner Date n=3	3. Public/Everyday Situations At a Bar In Class n=12
A. Old jeans or cutoffs/T-shirt or sweatshirt/Sandals or tennis shoes n=12	3.25	1.28	2.11
B. Jeans/Sweater or longleeve shirt/Hardsole shoes n=4	1.05	3.33	1.88
C. Jeans/Sportshirt/Jacket n=9	1.71	1.88	3.23

*Scores range from 1 to 4, where 1 = highly inappropriate and 4 = highly appropriate.

TABLE 2.

Mean Appropriateness Scores* of
Clothing Clusters by Situation Clusters
For "Bob"

SITUATION CLUSTER: EXAMPLES:	1. Formal Social Situations Play and Dinner in Chicago Fraternity Rush n=5	2. Outdoor Situations Golfing Picnic n=11	3. Fun Social Situations Party Movie Date n=10	4. Public Situations At Church In Court n=4
CLOTHING CLUSTER AND EXAMPLES				
A. Sports Coat/Dress Slacks/Tie n=6	3.87	1.00	1.03	1.58
B. Gym Shorts/T-shirt/ Golf or Athletic Shoes n=2	1.00	3.52	1.15	1.00
C. Old Jeans or Cutoffs/ T-shirt or Rugby Shirt/ Tennis Shoes n=9	1.00	3.40	1.84	1.19
D. Dress Jeans or Slacks/ Sports Shirt/Earth Shoes n=13	1.27	1.83	3.28	3.43

*Scores range from 1 to 4, where 1 = highly inappropriate and 4 = highly appropriate.

TABLE 3

Mean Appropriateness Scores* of
Clothing Clusters by Situation Clusters
For "Ken"

SITUATION CLUSTER: EXAMPLES: CLOTHING CLUSTER AND EXAMPLES	1. Formal Social Situations First day on new job Date n=14	2. Public/Everyday Situations Shopping In Class n=6	3. Outdoor Situations At a Baseball Game At a Picnic n=5
A. Suit/Sports Coat n=7	3.03	1.62	1.00
B. Dress Slacks/Dress Shirt n=6	3.06	2.83	1.07
C. Jeans or Painter's Pants/ T-shirt n=7	1.71	3.45	2.37
D. Old, Torn Jeans or Cutoffs/ Sweatshirt n=5	1.00	2.45	3.60

*Scores range from 1 to 4, where 1 = highly inappropriate and 4 = highly appropriate.

TABLE 4

Mean Appropriateness Scores* of
Clothing Clusters by Situation Clusters
For "Tom"

SITUATION CLUSTER: EXAMPLES: CLOTHING CLUSTER AND EXAMPLES	1. Formal Social Situations Dinner at nice Restaurant At a wedding n=3	2. Outdoor Situations Playing tennis Hiking n=2	3. Fun Social Situations At a bar At a party n=8	4. Everyday Situation Driving in the country Bowling n=12
A. Dress Slacks/Dress Shirt/Tie n=1	3.67	1.00	2.00	1.00
B. Work Jeans or Cutoffs/ T-shirt or Sleeveless Shirt n=4	1.08	3.50	2.13	2.38
C. Jeans/Old Shirt or T-shirt/Moccasins n=15	1.62	1.83	3.22	3.29
D. Good Jeans/Sports Shirt n=5	2.67	1.50	3.23	2.51

*Scores range from 1 to 4, where 1 = highly inappropriate and 4 = highly appropriate.

these subjects are reasonably homogeneous in the types of situations which affect their clothing choices. The clothing clusters show that despite the presence of jeans in over half of the clothing clusters for this sample, there are some clear clusters of clothing which are seen to be differentially appropriate in these situations. There is somewhat less homogeneity in clothing clusters. All four subjects showed clusters consisting of jeans and a t-shirt, but only two subjects each yielded clusters of dress jeans and a sports shirt, a sportcoat or suit, or dress slacks and a dress shirt. There was also one additional cluster for the first three subjects which was not entirely shared with another of the four subjects. However, given these slight differences in clothing clusters, there is a great similarity in the patterns of types of clothing judged appropriate for the different types of situations. For this sample the primary difference seems to be in whether or not the subject finds it more appropriate to wear a suit or sportcoat, dress slacks, or dress jeans in social situations. In this instance, differences might be attributed less to individual preferences in clothing than to differences in the nature of the social situations encountered ("formal" versus "fun"). Thus it generally appears that these individuals would generally feel comfortable if they were to exchange wardrobes and would tend to choose the same types of outfits for a given situation type.

In considering the perceived situation characteristics which were also measured, there was found to be much less agreement evidenced among subjects than there is in the behavioral appropriateness means. This provides at least suggestive evidence that despite similarities in behaviors

within situations, the perceptions of these situations are not homogeneous. If at least part of clothing selection is assumed to be imitative this is readily understandable. Subjects may discover for instance what is acceptable clothing to wear in a bar without all putting the same labels on such situations or all experiencing the same feelings within these situations. In examining the shared clothing attributes measured, a greater amount of agreement between subjects was observed, but certain descriptive phrases such as "comfortable" appeared in nearly all accounts of how subjects felt wearing the clothes in the situation where they were worn. In retrospect, asking subjects how they felt wearing the clothes in the situation may account for these similarities since feeling comfortable should be a common outcome of wearing clothing which the individual feels is appropriate for the situation.

Discussion

In the analyses of data from the males whose results are not presented, the behavioral-appropriateness-based situation clusters derived all parallel those factors shown in the tables above, except that for one subject an "impression formation" cluster emerged which might be characterized as instances in which the subject felt he would be evaluated by important others for the first time. The clothing clusters derived on these subjects repeated those found in Tables 1 through 4. The analyses of the data from the eight female subjects also showed reasonably good correspondence between the situational clusters of different subjects and between the clothing which they chose to wear within these situations (skirt and dress roughly substituted for dress slacks and sportscoat).

As with the male subjects, a social cluster emerged consistently, but the everyday cluster was more common (7 of 8), and with the exception of one subject, the outdoor cluster was not obtained. Instead, a work and meeting cluster was found. As with the male subjects however, it appears that female wardrobe selections were keyed to an average of three or four situation types. This represents greater situational specificity in clothing selections than the notion of universally acceptable ensembles would allow (even the nearly universal blue jeans shows product differentiation keyed to situation types), but a smaller number of situational response patterns than were initially anticipated. There were, for instance, fewer apparent clothing types than Holman's (1976) research found which college students were able to discern in perceptions of others' clothing.

If the present results are typical of other U.S. college students and if these choices of items from clothing wardrobes are reflected in choices of items for clothing wardrobes, the clothing items which can be regarded as alternatives for common consumption situations are relatively numerous, providing a broad definition of three or four markets in U.S. college student clothing. The assumption of consumption choices being a surrogate for anticipated consumption effects on product purchase, would need to be checked however, since there may be situations which are too isolated and infrequent to emerge as clusters, but which are important enough to have a major impact on clothing selections. For instance, the timing of the present study is such that even though many of the students were less than a year away from graduation, no job interviews were captured. Nevertheless the importance of this anticipated consumption situations may well have strongly affected clothing purchases following the data collection period.

It might also be thought that the use of diary data and the focus on consumption choices would preclude the fitting of new products into the situational taxonomies derived. However if new product alternatives are shown or described and the subject is asked to include these in the appropriateness matrix, the free response nature of the method may be retained while adding new products to the potential product set. One further caution which normally must be extended in developing situational taxonomies is also handled quite neatly by the present method. The caution is that when dealing with behaviorally based situational taxonomies the apparent situation-behavior effects can be misleading if some of the situation types rarely or never occur for a subject. However, since the subject has generated the input situations from his or her own experience and since with diary data situational occurrence frequencies may be calculated for use in weighting results, this problem need not occur here. There are still problems when the results indicate that there is not sufficient homogeneity of situational effects to allow dealing with situation types for an aggregate market or for several identifiable submarkets with homogeneous situational effects. But this problem is essentially what the method is intended to detect.

CONCLUSION

The foregoing results were intended to present a limited example of a method recommended for constructing product-specific consumption situation taxonomies relevant to understanding how a group of products may be positioned situationally by consumers. The method may be regarded as a useful exploratory step which can aid in discovering relevant

consumption situation types and in assessing the homogeneity of the resulting typologies. By beginning with this free-response approach to situation and product description, the researcher need not begin with assumptions about the situations which are relevant to the consumer, about the salient characteristics of these situations, or about the particular products seen by the consumer as alternatives within any or all of these situations. It is still necessary to broadly define the product class to the consumer initially, and to have these consumers provide longitudinal details on the occurrence of various situations. However this need only be done with a limited number of representative consumers since the analyses are intraindividual. Once a situational typology or typologies have been developed for this initial sample, subsequent aggregate research can be conducted using structured responses to prototypical situational descriptions. It is at this point that more general implications for consumer behavior theory can begin to be noted.

Variations on the methods illustrated may be expected to provide additional insights into the effects of consumption situations on consumer purchases. Pervin (1976) shows how a similar procedure might be used to form a matrix of situations and situational attributes in which the entries are applicability ratings. By analyzing this data, a taxonomy of types of situations based on perceived situational characteristics can then be derived. If the subjects have also provided behavioral data as in the current study, the perceptually-based situational taxonomy can be compared to the behaviorally-based situational taxonomy in order to determine whether the perceived differences in situations translate into differences in purchase behavior.

Earlier it was noted that there are parallels between the classification of individual differences and the classification of situational differences. Although the task may be similar, it is apparent that situational classification currently suffers from a substantial lack of research by comparison to individual differences. However unlike individual differences, consumption situational differences may be expected to vary greatly according to the type of consumption being considered. This in turn can greatly simplify the task of constructing situational taxonomies, since it is both simpler and more appropriate to consider product-specific situational effects. The means for assessing such effects and utilizing them in product planning are now at hand and the evidence is growing that an awareness of these effects can aid the prediction and understanding of consumer choice behavior.

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